UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PER-OLOF LARSSON and PER-ERIK GUSTAVSSON

Appeal No. 2006-0021
Application No. 09/763,788

ON BRIEF

Before KIMLIN, WALTZ and KRATZ, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-12 and 17-19.

Claims 20-30, the other claims remaining in the present application, have been withdrawn from consideration.

Claim 1 is illustrative:

> 1. A composite material, which comprises two or more components of which one is super-porous polysaccharide (main component) which outside the superpores contains a gel phase with micro-pores and the other component(s) (secondary component(s)) are different from the main component with exception of the case that the composite contains an electrically monolithic secondary component which is intended to be, or is connected between two electrodes.

The examiner relies upon the following references as evidence of obviousness:

Schaeffer et al. (Shaeffer)	4,111,838	Sep. 05, 1978
Manganaro et al. (Manganaro)	5,155,144	Oct. 13, 1992
Lihme et al. (Lihme)	5,866,006	Feb. 02, 1999
Larsson (WO '115)	WO 93/19115	Sep. 30, 1993

Appellants' claimed invention is directed to a composite material comprising a super-porous polysaccharide and one or more other components. The polysaccharide comprises superpores and a gel phase having micro-pores. The composite material may be in the form of particles that can be employed in a packed bed or a fluidized bed for separating materials.

The appealed claims stand rejected under 35 U.S.C. § 103 as follows:

(a) Claims 1-12 and 17-19 over WO '115 in view of Lihme,

(b) Claims 1-12 over WO '115 in view of Schaeffer,

(c) Claims 1-12 and 18 over WO '115 in view of Manganaro.

Appellants group claims 1-12 separately from claims 17-19 (see page 3 of brief). However, the Argument section of appellants' brief fail to set forth an argument that is reasonably specific to any particular claim on appeal. Accordingly, all of the appealed claims stand or fall together with claim 1. In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed Cir. 2002).

We have thoroughly reviewed each of appellants' arguments for patentability. However, we are in complete agreement with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the examiner's rejections for essentially those reasons expressed in the answer, and we add the following primarily for emphasis.

We consider first the rejection of all of the appealed claims under § 103 over WO '115 in view Lihme. WO '115, like appellants, discloses a super-porous polysaccharide comprising two phases, one containing superpores and the other containing micro-pores. As stated in appellants' specification, "[t]he invention relates to a composite material which is comprised [of] super-porous polysaccharide material of the type which has been

previously described in WO-A-9319115" (page 1, lines 5-6). Also, appellants' specification states that "[s]uper-porous polysaccharide material for use in the invention can be made in the same way as stated in WO-A-9319115" (page 3, lines 3-4).

As pointed out by the examiner, both appellants and WO '115 disclose a super-porous polysaccharide having super-pores or macropores and micro-pores of the same pore size. The examiner recognizes that WO '115 does not expressly teach the presence of a secondary component in the porous polysaccharide material. However, we concur with the examiner that Lihme evidences the obviousness of utilizing conglomerating agents in the polysaccharide of WO '115 for the purpose of binding, entrapping or carrying polysaccharide material (see Lihme at column 21, lines 1, et seq.). Significantly, claim 1 on appeal is of considerable breadth and encompasses any secondary component in composition with the polysaccharide.

Appellants submit that "it is neither disclosed nor even suggested that the **composite** material as claimed in the instant application can be manufactured in either the WO '115 or the Lihme reference" (page 4 of brief, last paragraph), and it is known that "the addition of other materials to the polysaccharide

to form composites can change these properties and disturb the emulsification" (page 5 of brief, first paragraph). However, although appellants assert that the instant invention demonstrates that, unexpectedly, "composites can be manufactured with desirable properties" (Id.), appellants have not presented a compelling rationale, let alone the requisite objective evidence, which establishes that one of ordinary skill in the art would be unable to composite any unspecified secondary component in a super-porous polysaccharide gel of WO '115. Inasmuch as Lihme, as well as Schaeffer and Manganaro, disclose that it was known in the art to composite secondary components with polysaccharide materials, we are persuaded that one of ordinary skill in the art would have had to resort to no more than routine experimentation to determine the necessary parameters for compositing a secondary component with the super-porous polysaccharide material of WO '115. Appellants have not demonstrated that their ability of incorporating a secondary component into the polysaccharide material of WO '115 would be considered unexpected by one of ordinary skill in the art. While appellants direct attention "to the examples in the captioned application which clearly demonstrate that suitable composite materials can be made" (page

5 of brief, second paragraph), appellants have not established that the results achieved in the specification examples would be considered unexpected.

We do not understand appellants' argument that the super-porous polysaccharide of WO '115 "is quite different from the instant invention" (page 6 of brief, second paragraph). As noted above, the present specification relates that the super-porous polysaccharide materials of appellants' invention are made in the same way, and have the same pore sizes, as disclosed in WO '115.

Turning to the § 103 rejection of WO '115 in view of Schaeffer, appellants "specifically assert that there is no disclosure in the '115 reference of making a material containing the large and small diameter pores" (page 8 of brief, last paragraph). Again, this argument is not understood inasmuch as WO '115 clearly teaches the presence of micropores and macropores in the polysaccharide material that correspond to the pore size ranges of appellants' material. Appellants do not address the obviousness of modifying WO '115 in accordance with Schaeffer in order to bind or carry the super-porous polysaccharide material.

It is appellants' argument that Schaeffer, as well as Manganaro, does not remedy the asserted deficiency of WO '115.

Concerning the § 103 rejection over WO '115 in view of Manganaro, appellants, as noted above, simply "reassert the arguments presented above as to the inapplicability as to the WO '115 reference and respectively assert that the addition of the Manganaro reference does not remedy these deficiencies" (page 10 of brief, second paragraph).

As a final point, we note that appellants base no arguments upon objective evidence of nonobviousness, such as unexpected results, which would serve to rebut the inference of obviousness established by the applied prior art.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

EDWARD C. KIMLIN)
Administrative Patent Judge)
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THOMAS A. WALTZ) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND
) INTERFERENCES
)
PETER F. KRATZ)
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